

What is claimed is:

1. A method of forming a device cover having a predetermined shape, said method comprising:

forming a preliminary cover member by attaching a first surface of an electroluminescent foil to a first surface of an electrically insulating foil, the electrically insulating foil having the predetermined shape and having a first opening therethrough, the electroluminescent foil having an opening therethrough corresponding with the first opening through the electrically insulating foil;

placing the preliminary cover member in a mold of the predetermined shape, the mold having bosses corresponding with the first opening and with a second opening; and

injecting plastic into the mold and into contact with the preliminary cover member to form the decorative cover, the bosses providing openings through the plastic corresponding with the first and second openings.

2. A method as claimed in claim 1, further comprising, before forming the preliminary cover member, preforming the electrically insulating foil to the predetermined shape and forming the first opening through the electrically insulating foil.

3. A method as claimed in claim 2, wherein the preforming includes forming a ridge around the first opening through the electrically insulating foil, and wherein the opening through the electroluminescent foil surrounds the ridge to position the electroluminescent foil on the electrically insulating foil.

4. A method as claimed in claim 1, further comprising, before forming the preliminary cover member, forming the opening through the electroluminescent foil.

5. A method as claimed in claim 1, wherein forming the preliminary cover member includes attaching the first surface of the electroluminescent foil to a first surface of an electrically insulating foil having a graphic thereon.

6. A method as claimed in claim 4, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

7. A method as claimed in claim 1, further comprising, before forming the preliminary cover member, providing a graphic on the first surface of the electrically insulating foil.

8. A method as claimed in claim 7, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

9. A method as claimed in claim 1, further comprising, before forming the preliminary cover member, providing a graphic on the electroluminescent foil.

10. A method as claimed in claim 9, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

11. A method as claimed in claim 1, wherein forming the preliminary cover member includes positioning a further foil between the electrically insulating foil and the electroluminescent foil, the further foil having a graphic on a surface thereof, the further foil attaching the electroluminescent foil to the electrically insulating foil.

12. A method as claimed in claim 11, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

13. A method as claimed in claim 1, further comprising:
allowing the plastic to cool; and
removing the decorative cover from the mold.

14. A method of forming a device cover having a predetermined shape, said method comprising:

forming a preliminary cover member by attaching a first surface of an electroluminescent foil to a first surface of an electrically insulating foil, the electrically

insulating foil having the predetermined shape, the electroluminescent foil having a first opening therethrough;

forming an opening through the electrically insulating foil at a location corresponding with the first opening through the electroluminescent foil;

placing the preliminary cover member in a mold of the predetermined shape, the mold having bosses corresponding with the first opening and with a second opening; and

injecting plastic into the mold and into contact with the preliminary cover member to form the decorative cover, the bosses providing openings through the plastic corresponding with the first and second openings.

15. A method as claimed in claim 14, further comprising, before forming the preliminary cover member, preforming the electrically insulating foil to the predetermined shape.

16. A method as claimed in claim 14, further comprising, before forming the preliminary cover member, forming the opening through the electroluminescent foil.

17. A method as claimed in claim 14, wherein forming the preliminary cover member includes attaching the first surface of the electroluminescent foil to a first surface of an electrically insulating foil having a graphic thereon.

18. A method as claimed in claim 17, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the

electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

19. A method as claimed in claim 14, further comprising, before forming the preliminary cover member, providing a graphic on the first surface of the electrically insulating foil.

20. A method as claimed in claim 19, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

21. A method as claimed in claim 14, further comprising, before forming the preliminary cover member, providing a graphic on the electroluminescent foil.

22. A method as claimed in claim 21, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

23. A method as claimed in claim 14, wherein forming the preliminary cover member includes positioning a further foil between the electrically insulating foil and the electroluminescent foil, the further foil having a graphic on a surface thereof.

24. A method as claimed in claim 23, wherein forming the preliminary cover member includes attaching a thermally insulating foil to a second surface of the electroluminescent foil, the thermally insulating foil having openings therethrough corresponding with the first and second openings.

25. A method as claimed in claim 14, further comprising:

allowing the plastic to cool; and

removing the decorative cover from the mold.

26. A device cover having a predetermined shape, said device cover comprising:

a thin, rigid support base shaped in accordance with the predetermined shape;

an electroluminescent foil overlying said support base; and

an electrically insulating foil overlying said electroluminescent foil; wherein

said support base, said electroluminescent foil, and said electrically insulating foil have a first opening therethrough for insertion of a control key of a device covered by said decorative cover;

said support base has a second opening therethrough for insertion of an electrical connector to connect said electroluminescent foil to an electrical power source so as to provide power to said electroluminescent foil;

said electrically insulating foil has a ridge around the electrically insulating foil first opening and extending through the first opening in said electroluminescent foil to position said electroluminescent foil on said electrically insulating foil.

27. A device cover as claimed in claim 26, wherein said electrically insulating foil has a graphic thereon.

28. A device cover as claimed in claim 27, further comprising a thermally insulating foil between said support base and said electroluminescent foil, said thermally insulating foil having openings therethrough corresponding with the first and second openings.

29. A device cover as claimed in claim 26, wherein said electroluminescent foil has a graphic thereon.

30. A device cover as claimed in claim 29, further comprising a thermally insulating foil between said support base and said electroluminescent foil, said thermally insulating foil having openings therethrough corresponding with the first and second openings.

31. A device cover as claimed in claim 26, further comprising a further foil between said electrically insulating foil and said electroluminescent foil, said further foil having a graphic thereon and having a hole therethrough located around the electrically insulating foil ridge to position said further foil.

32. A device cover as claimed in claim 31, further comprising a thermally insulating foil between said support base and said electroluminescent foil, said thermally

insulating foil having openings therethrough corresponding with the first and second openings.

33. A device cover as claimed in claim 26, wherein said electroluminescent foil, when provided with power, provides white light.

34. A device cover as claimed in claim 26, wherein said electroluminescent foil, when provided with power, provides colored light.

35. A device cover as claimed in claim 26, wherein said electroluminescent foil includes a plurality of electroluminescent foil segments.

36. A device cover as claimed in claim 35, wherein said foil segments, when provided with power, provide light of various colors.

37. A covered electronic device, said covered electronic device comprising:

- a thin, rigid support base;
- an electroluminescent foil overlying said support base; and
- an electrically insulating foil overlying said electroluminescent foil, wherein said support base, said electroluminescent foil, and said electrically insulating foil have a first opening therethrough and said support base has a second opening therethrough;
- a printed circuit board;

a plurality of electronic components mounted on said printed circuit board and electrically interconnected to form an electronic device, said electronic components including a control key for said electronic device, said control key extending through the first opening;

a connector extending through the second opening to connect said electroluminescent foil to circuitry on said printed circuit board, permitting provision of electrical power to said electroluminescent foil from an electrical power source also connected to said printed circuit board; and

a second base cooperating with said support base to enclose said electronic device in a cover, wherein:

said electrically insulating foil has a ridge around the electrically insulating foil first opening; and

said electroluminescent foil first opening is located around the ridge to position said electroluminescent foil on said electrically insulating foil.

38. A covered electronic device as claimed in claim 37, wherein said electrically insulating foil has a graphic thereon.

39. A covered electronic device as claimed in claim 38, further comprising a thermally insulating foil between said support base and said electroluminescent foil, said thermally insulating foil having openings therethrough corresponding with the first and second openings, the thermally insulating foil first opening located around the ridge to position said thermally insulating foil.

40. A covered electronic device as claimed in claim 37, wherein said electroluminescent foil has a graphic thereon.

41. A covered electronic device as claimed in claim 40, further comprising a thermally insulating foil between said support base and said electroluminescent foil, said thermally insulating foil having openings therethrough corresponding with the first and second openings, the thermally insulating foil first opening located around the ridge to position said thermally insulating foil.

42. A covered electronic device as claimed in claim 37, further comprising a further foil between said electrically insulating foil and said electroluminescent foil, said further foil having a graphic thereon and having holes therethrough located around the ridges to position said further foil.

43. A covered electronic device as claimed in claim 42, further comprising a thermally insulating foil between said support base and said electroluminescent foil, said thermally insulating foil having openings therethrough corresponding with the first and second openings, the thermally insulating foil first opening located around the ridge to position said thermally insulating foil.

44. A covered electronic device as claimed in claim 38, wherein said electroluminescent foil, when provided with power, provides white light.

45. A covered electronic device as claimed in claim 38, wherein said electroluminescent foil, when provided with power, provides colored light.

46. A covered electronic device as claimed in claim 38, wherein said electroluminescent foil includes a plurality of electroluminescent foil segments.

47. A covered electronic device as claimed in claim 46, wherein said foil segments, when provided with power, provide light of various colors.